

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,374	12/31/2003		Patrick W. Smith	61882.00011	4893
49754	7590	08/22/2006		EXAMINER	
		IONAL, INC.	KITOV, ZEEV V		
17800 N. 85TH STREET SCOTTSDALE, AZ 85255-9603				ART UNIT	PAPER NUMBER
				2836	

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<del>-</del>		Application No.	Applicant(s)					
	Office Action Commence	10/750,374	SMITH ET AL.					
Office Action Summary		Examiner	Art Unit	_				
		Zeev Kitov	2836					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATES IN THE MAILING THE M	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tire will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. mely filed the mailing date of this communication ED (35 U.S.C. § 133).					
Status								
1)⊠	Responsive to communication(s) filed on 18 M	ay 2006.						
2a) <u></u> ☐	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)🖂	Claim(s) 1 - 18 is/are pending in the application	٦.						
4a) Of the above claim(s) 9 - 18 is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
	6)⊠ Claim(s) <u>1 - 8</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)[_]	Claim(s) are subject to restriction and/or	r election requirement.						
Applicat	ion Papers							
9) The specification is objected to by the Examiner.								
10)⊠ The drawing(s) filed on <u>31 December 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
_	under 35 U.S.C. § 119		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
_	-	priority under 35 U.S.C. § 119(a	ı)-(d) or (f).					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
·	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attach	,t(c)							
Attachmen	n(s) ce of References Cited (PTO-892)	4) Interview Summary	/ (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date								
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date 12/31/03.	5)	Patent Application (PTO-152) .					
. чрс		<u> </u>						

Art Unit: 2836

## **DETAILED ACTION**

## Election/Restriction

Applicant's election of Claims 1 - 8 in the reply filed on May 18, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Specification

Specification is objected to due to a following matter. In paragraph [0046] the Application recites following: "The initial voltage may correspond to a stimulus peak voltage (SPV) as in FIG. 3 (e.g., at about a skeletal muscle nerve action potential). The SPV may be essentially the initial voltage for a fast rise time waveform. The SPV following ionization may be from about 3 Kvolts to about 6 Kvolts, preferably about 5 Kvolts. The SPV without ionization may be from about 100 to about 600 volts, preferably from about 350 volts to about 500 volts, most preferably about 400 volts".

Examiner has been surprised to learn that the skeletal muscle nerve action potential, which according to the Specification is about a level of SPV, is estimated in hundreds or thousands volts. Clarification of the matter or correction is required.

Art Unit: 2836

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 4 and 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A reason for that is that both claims recite a pulse having a peak voltage less than an ionization potential. However, the ionization potential value is not known and is hard to estimate. The Specification recites range of tens and hundreds of kilovolts ([0043] and Fig. 3). In accordance with the Specification and for purpose of examination, the peak voltages values have been interpreted as having values lower than 1000 volts.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, and 6 - 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ragner (5,698,815). Regarding Claim 1, Ragner discloses an electronic disabling device implementing a step of providing the stimulus signal in accordance with a strike stage, i.e. pulses with a voltage lower than 1000 V (Fig. 4, col. 12, lines 5 – 18 and col.

Art Unit: 2836

4, lines 61 – 65); a step of providing the stimulus signal in accordance with a hold stage, i.e. few defibrillation pulses (Fig. 4, col. 12, lines 18 – 25), and a step of providing the stimulus signal in accordance with a rest stage, i.e. providing no stimulus. According to Specification [0056], the rest stage may include no stimulus signal.

Regarding Claim 2, Ragner discloses the strike stage having a first repetition rate of 12 pulses per second (Fig. 4, col. 12, lines 26 – 33) and the second repetition rate is lower than the first repletion rate (shown in Fig. 4).

Regarding Claims 4, 6 and 7, Ragner discloses the stimulus signal during the strike stage having a peak voltage lower than 1000 volts (col. 4, lines 57 – 65), repetition rate of 12 pulses per second (Fig. 4, col. 12, lines 26 – 33) and delivering a charge in the range from 0 to 500 micro-coulombs (col. 4, lines 57 – 65).

Regarding Claim 8, Ragner discloses reversing the polarity of consecutive pulses in the series (shown in Fig. 4).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ragner in view of Brastow et al. (US 4,388,513). Claims 3 and 5 differ from Claim 1 rejected above by their limitations of applying the high voltage pulse followed by the

Application/Control Number: 10/750,374 Page 5

Art Unit: 2836

lower voltage and lower charge pulse. Brastow et al. disclose the system of treating the matter, which includes application of high voltage potential to the matter followed by the pulse of the lower voltage (col. 8, lines 49 - 55). The reference has the same problem solving area, namely treating the matter with pulses of variable amplitude applied in two pulse trains. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Ragner solution by applying first pulse train of higher voltage pulses followed by second pulse train of lower (normal) voltage pulses according to teachings of Brastow et al., because as Brastow et al. state (col. 8, lines 49 - 55), the first pulse train is necessary to ionize the atmosphere between the electrode and the matter.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose current telephone number is (571) 272 - 2052. The examiner can normally be reached on 8:00 – 4:30. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272 – 2800, Ext. 36. The fax phone number for organization where this application or proceedings is assigned is (571) 273-8300 for all communications.

Z.K. 7/23/2006

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CERTITY 2850

Art Unit: 2836

Page 6